### Links between Gender and Climate Change

Climate change does not affect women and men in the same way and it has, and will have, a gender-differentiated impact. Women, due to their social roles, discrimination and poverty, are affected differently by the effects of climate change and by extreme climate events that often translate into disasters (UNDP 2009). Therefore all aspects related to climate change (i.e. mitigation, adaptation, policy development, decision-making) must mainstream a gender perspective.

Climate Change and its impact on Women (Based on Aguilar 2009)

#### **Potential Risk:**

#### **Example:**

#### **Effect on Women:**

# Increased ocean temperatures

Rising incidence of coral bleaching due to thermal stress (Donner et al 2007).

Loss of coral reefs can damage the tourism industry, a sector in which women comprise 46 percent of the workforce (Hemmati, 1999).

# Increased drought and water shortage

Morocco had 10 years of drought from 1984 to 2000; northern Kenya experienced four severe droughts between 1983 and 2001 (Nelson et al 2002)

Women in developing countries are often the primary collectors, users, and managers of water. Decreases in water availability will jeopardize and their families' livelihoods and increase their workloads. (Nelson et al 2002)

### Increased extreme weather events

Greater intensity and quantity of cyclones, hurricanes, floods, and heat waves.

In a sample of 141 countries it was found that natural disasters on average kill more women than men or kill women at an earlier age than men (Neumayer&Plümper 2007).

### Increased extreme weather events

Greater intensity and quantity of cyclones, hurricanes, floods, and heat waves.

Potential Effect on Men: Many men are exposed to risky situations and even die because society expects them to take heroic rescue action. There were more immediate deaths among men when hurricane Mitch struck because they took fewer precautions when facing risks. (Bradshaw 2004).

# Increased epidemics

Climate variability played a critical role in malaria epidemics in the East African highlands (Zhou, et al., 2004) and accounted for an estimated 70 percent of variation in recent cholera series in Bangladesh (Rodo et al 2002).

Women have less access to medical services and their workloads increases when caring for the sick. Adopting new strategies for crop production or mobilizing livestock is harder for female-headed and infected households (Nelson et al 2002).

#### Loss of species

By 2050, climate change could result in species extinctions ranging from 18 to 35 percent (Thomas *et al* 2004).

Women often rely on crop diversity to accommodate climatic variability, but permanent temperature change will reduce agro-biodiversity and traditional medicine options.

# Decreased crop production

In Africa, crop production is expected to decline 20–50 percent in response to extreme El Niño-like conditions (Stige et al., 2006).

Rural women produce half of the world's food and 60 - 80% of the food in most developing countries (FAO, 2008). In Africa, the share of women affected by climate-related crop changes could range from 48% in Burkina Faso to 73% in the Congo(FAO, n.a.).

Women are not just helpless victims of climate change – women are active agents of change and critical leaders in devising solutions to climate change. The empowerment of women can drive the effectiveness of strategies related to energy use, deforestation, economic growth, science and technology, population, and policy making, among other issues. There is a plethora of evidence and data from natural resource and other sectors confirming that gender equality is a prerequisite for effective climate change adaptation and mitigation initiatives.

#### Women's Contribution to Climate Change Solutions

(Based on Aguilar et al.2007b; Araujo and Quesada-Aguilar, 2007; UNDP 2009).

#### Change for the better:

#### **Women's Contribution:**

#### **Example:**

### **Energy Alternatives**

By growing biofuel feedstock alongside food crops, women can spread their risk and gain access to additional energy sources. Women in Ghana use Jatropha biodiesel to produce shea butter and in Mali, they use seeds to produce soap (GEF, 2002). In Kenya, local biofuel markets provide cash which could support the use of cleaner, more efficient energy sources (FAO 2007).

### Reduction of Greenhouse Gases

Women's groups could plant trees, an activity that will also provide poor rural women with a small income and some economic independence.

Under the Maya Nut Program, women in Central America have planted 400,000 trees (Brosimum aliscastrum). The project provides women with a food source, an income, and an opportunitie to participate in carbon trading with the USA and Europe to reduce GHG (Aguilar et al 2007b).

#### **Afforestation**

Men and women have distinct realms of knowledge and approaches in relation to natural resource management, both of which are necessary for sustainable use and conservation. The Chipko Movement demonstrated that women can make a difference when protecting forests and developing afforestation projects. Women looked after the trees so exhaustively that the survival rate was between 60-80% (Joshi, 2007).

# Gender-sensitive early warning and risk systems

Women could aid in the monitoring of changes in weather conditions, as part of the team involved in hurricane early warning systems.

In the Honduran community of La Masica, the women took charge of monitoring the early warning systems. During Hurricane Mitch, not a single death was reported in La Masica because the municipal government evacuated the population in time (sánchez del Valle, 2000).

# Adaptation to droughts

Women a have unique knowledge of their surroundings and can provide valuable information of where to find water sources. During a drought in Micronesia, the women's ancestral knowledge about the islands' hydrology allowed them to easily find places to dig wells for drinking water. The information provided by these women benefited the entire community (Anderson, 2002).

### Adaptation to floods

Women can build proper infrastructure and help monitor weather changes as part of the flood early warning system.

In Bangladesh a woman named Sahena has organized a committee to prepare women for floods. The committee teaches the women to make portable clay ovens, raise their houses, and use radios to hear of possible floods or climate change (Oxfam, 2008).

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